

CLAIM SUMMARY DOCUMENT

The following listing of claims will replace all prior versions and listings of claims in this application.

1. (Currently Amended) An implantable electrode lead having a distal end provided with at least one electrode to be implanted in a predetermined portion of a living body in order to perform at least one of transmission of an electrical stimulation pulse to a living body and sensing of an electrical signal from the living body, a proximal end provided with connecting means having at least one connecting terminal to be connected to an implantable medical instrument, and a lead body provided between said distal end and said proximal end and adapted to electrically connect said at least one electrode and to said connecting means to each other at least one connecting terminal, ~~characterized in that~~

said lead body ~~includes~~ comprising a helical parallel coil of a plurality of conductive wires ~~with respectively having different mechanical properties and~~ insulated from each other, and

said plurality of conductive wires ~~being electrically connected to connecting~~ said at least one electrode ~~to be parallel to each other~~ said at least one connecting terminal in parallel so as to form a parallel circuit.

2. (Currently Amended) The implantable electrode lead according to claim 1, ~~characterized in that~~ wherein said ~~plurality of wires are wires with different~~

properties include different electrical resistances and different mechanical
properties.

3. (Currently Amended) The implantable electrode lead according to claim 1, ~~characterized in that~~ wherein each of said plurality of conductive wires is a conductive wire with a single layer made of at least one metal material, or a composite conductive wire with a plurality of different single layers made of at least one metal material.

4. (Currently Amended) The implantable electrode lead according to claim 3, ~~characterized in that~~ wherein said composite conductive wire with said plurality of different single layers has a clad structure obtained by covering a first single layer with a second single layer among said plurality of types of single layers.

5. (Currently Amended) The implantable electrode lead according to claim 1, ~~characterized in that~~ wherein said plurality of conductive wires are made of ~~have~~ different materials.

6. (Currently Amended) The implantable electrode lead according to claim 1, ~~characterized in that~~ wherein among said plurality of conductive wires, a first

conductive wire has an electrical resistivity of not more than $5\ \mu\Omega\cdot\text{cm}$ and a second conductive wire has an electrical resistivity of not less than $5\ \mu\Omega\cdot\text{cm}$.

7. (Currently Amended) The implantable electrode lead according to claim 3, ~~characterized in that~~ wherein said composite conductive wire has a first single layer made of a metal material or alloy material with an electrical resistivity of not more than $5\ \mu\Omega\cdot\text{cm}$ and a second single layer made of a metal material or alloy material with an electrical resistivity of not less than $5\ \mu\Omega\cdot\text{cm}$.

8. (Currently Amended) The implantable electrode lead according to claim 3, ~~characterized in that~~ wherein said first and second single layers of said composite conductive wire contain silver and a cobalt alloy, respectively.

9. (Canceled)

10. (Currently Amended) An implantable medical instrument using an implantable electrode lead having ~~an~~ at least one electrode to be implanted in a predetermined portion of a living body and a lead body to ~~be electrically connected~~ connect to said at least one electrode to at least one connecting terminal of said instrument, ~~characterized in that~~

said lead body ~~includes~~ comprising a helical parallel coil of a plurality of conductive wires ~~with~~ respectively having different ~~mechanical~~ properties and insulated from each other,

said plurality of conductive wires ~~being electrically connected to~~ connecting said at least one electrode to ~~be parallel to each other~~ said at least one connecting terminal in parallel so as to form a parallel circuit, and

said implantable medical instrument has informing means for ~~discriminating~~ and determining that at least one of said ~~different~~ plurality of conductive wires is ~~fractured~~ damaged based on conductivity between said at least one electrode and said at least one connecting terminal, and for informing of the damage.

11. (Currently Amended) The implantable medical instrument according to claim 10, ~~characterized by~~ further having measuring means for measuring a motion state or posture of the living body where said electrode is implanted.

12. (Currently Amended) The implantable medical instrument according to claim 10, ~~characterized in that~~ wherein said informing means measures a parameter that changes on the basis of a change in total electrical resistance of said plurality of conductive wires, compares the parameter with a preset reference parameter, and informs that at least one of said plurality of conductive wires is fractured when the parameter that changes is smaller than the reference parameter.

13. (Currently Amended) The implantable medical instrument according to claim 12, ~~characterized in that~~ wherein the parameter includes either one of current, frequency, and time.

14. (Currently Amended) The implantable medical instrument according to claim 11, ~~characterized in that~~ wherein said measuring means further has acceleration sensor means for measuring an acceleration, and measures the motion state or posture of the living body on the basis of a measurement result of said acceleration sensor means.

15. (Currently Amended) The implantable medical instrument according to claim 11, ~~characterized in that~~ wherein said implantable medical instrument further has storage means, and when a measurement result obtained by said measuring means satisfies a predetermined condition, the measurement result is recorded in said storage means.

16. (Canceled)

17. (New) The implantable medical instrument according to claim 10, wherein said different properties include different electrical resistances and different mechanical properties.